1. (Amended) A catheter having an elongate configuration with a proximal end and a distal end, the catheter configured to contain a heat exchange fluid in heat exchange relationship with at least a portion of the body of a patient and comprising:

an outer tube having an elongate configuration and a first lumen;

an inner tube disposed in the first lumen of the outer tube and having a second lumen extending between the proximal end and the distal end of the catheter;

portions of the inner tube defining a first heat exchange fluid flow path extending along the second lumen between the proximal end and the distal end of the catheter;

portions of the outer tube and the inner tube defining a second heat exchange fluid flow path extending between the proximal end and the distal end of the catheter [first tube and the second tube]; and

a plurality of hollow fibers having walls defining lumens for containing the heat exchange fluid, the hollow fibers being sealingly coupled to the first heat exchange fluid flow path and the second heat exchange fluid flow path to thereby provide a closed fluid connection [providing fluid communication] between the first fluid flow path and the second fluid flow path for transport of heat exchange fluid between the first fluid flow path and the second fluid flow path.

Sub C1

3. (Amended) The catheter recited in Claim 2, wherein the inner tube is movable [has properties for moving] relative to the outer tube, and wherein relative